

THE JERUSALEM ARTICHOKE AS A WAR PLANT

IN the March number of the *Scientific Monthly*, Professor T. D. A. Cockerell publishes an interesting article entitled "The Girasole, or Jerusalem Artichoke, a Neglected Source of Food." It will be interesting to add that the French Academy of Agriculture has by no means overlooked this important plant, the French name of which is *topinambour*. For the last two or three years the Comptes Rendus des Séances de l'Académie d'Agriculture has contained frequent references to the value of this crop, most of the communications having been made by M. Schribaux. In the last number, which comes to my desk today, M. Schribaux presents an interesting communication from M. Thiry, director of the Agricultural School of Tomblaine near Nancy. He says that in a normal year only about a hundred hectares are planted in Lorraine, but he believes that the plant is capable of rendering great services. In his own family they have regularly raised and eaten the *topinambour* since at least 1860. All of the agricultural land in Lorraine is not well adapted to its cultivation, only light lands being best adapted. In general, they feed the tubers to the horses, giving a little to the pigs, but never to the cattle, for they think that this diet gives the milk a bluish tinge. He states that the crop is more productive than potatoes, and they often raise at Tomblaine thirty thousand kilograms to the hectare. He uses the variety called *patate* by Vilmorin. It has more regular tubers, and while not less productive is more delicate than the ordinary variety. He has eaten them in his house for a long time, since he tasted Jerusalem artichokes in England, and he has fed them to the children of the refugees whom he has taken in. Last year the people of Nancy wished to eat them, since potatoes were out of their reach, but at that time they were beginning to germinate and were not edible. He thinks the plant is a very remarkable one, and that in fertile earth well worked it will repay the labor of the farmer with great interest. Whether the climate is severe or dry, and even when the earth

is poor and weedy, the crop will still be satisfactory, and it lacks the diseases of the potato. He believes it to be a *war plant of the first order*. He thinks that a serious effort should be made to propagate this vegetable in all France.

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POISONING TREE PARASITES WITH CYANIDE OF POTASSIUM

SOME three years ago there was discussion in this journal of the method of killing insect parasites of fruit trees by placing cyanide of potassium under the bark. Success was reported from such inoculation of peach trees. Others reported that cyanide of potassium mixed with other poisons, when used in the same manner, caused the death of the tree within two or three years.

Three years ago, in the spring, I bored half inch holes in each of six apple and pear trees and filling these holes with powdered cyanide of potassium, "chemically pure," plugged them up. Four of these trees were apparently dying from scale, the other two were infested but not dying. During the summer all six became free from scale and the four dying ones began to recuperate. In the fall both the apple and the pear trees bore good fruit which was palatable and harmless. All the trees are now healthy and vigorous after three years, and there are no areas of dead bark around the inoculation holes.

This seems an indication that inoculation with cyanide of potassium, when used without admixture of other drugs, is not necessarily injurious to apple and pear trees. Its effectiveness as a parasite exterminant is rendered doubtful, however, by the fact that the scale died on all my other trees which were not inoculated. One of these trees was practically dead at that time, having lost all but two of its branches, but it is now vigorous. I lost two good trees from scale before this. Scale had been becoming more and more troublesome in northern Ohio for a number of years, but three years ago many infested trees became entirely free or almost free from the pest, and in this whole region there was marked improvement in the orchards, which